## HEAVY EQUIPMENT MECHANIC

## NATURE OF WORK

This is skilled diagnostic and mechanical work in the repair and preventive maintenance of a diversified heavy equipment fleet which includes heavy street maintenance, earth-moving, and construction equipment.

Work involves responsibility for diagnosis, repair, and preventive maintenance work on a variety of conventional and specialized heavy equipment and motorized machinery. An employee of this class performs the actual repair, service, or maintenance work, and any final tests or checks to determine that the work has been completed satisfactorily. This class is differentiated from other classes in that the primary work performed relates to the repair of complex medium and heavy types of equipment. General supervision is received from a technical superior, and work is reviewed in progress and on completion. Supervision may be exercised over subordinate employees.

#### **EXAMPLES OF WORK PERFORMED**

Performs preventive maintenance and service on a widely diverse fleet of light, medium and heavy duty equipment and machinery including bulldozers, motor graders, front-end loaders, air compressors and heavy truck hydraulic systems.

Brakes - Repairs, replaces and adjusts braking systems which involves turning and trueing rotors and drums, honing wheel cylinders, bleeding and adjusting the system, and pressure testing the entire braking system.

Fuel Systems - Diagnoses, adjusts, repairs, overhauls and replaces fuel systems with the use of electronic test equipment.

Ignition Systems - Diagnoses and repairs ignition systems with the use of electronic equipment.

Transmissions and Differentials - Diagnoses, adjusts, repairs, replaces and overhauls manual, automatic and hydrostatic transmissions and differentials.

Electrical Systems - Diagnoses, repairs and replaces system components which include batteries, relays, bulbs and wiring with the use of electrical testing equipment.

Steering and Suspension - Diagnoses, repairs, replaces and overhauls system components which include springs, axles, shocks, king pins, idlers, bearings and steering assemblies.

Engines - Diagnoses, adjusts, repairs, services and overhauls gasoline and diesel engines with the use of electronic test equipment.

Control Systems - Diagnoses, adjusts, repairs, services and replaces various types of control systems such as compressed air, vacuum, electronic, and hydraulic.

Body and Frame - Performs light body repair and welding work including spot painting and glass replacement.

Completes records on vehicle maintenance such as date work performed, description of corrective repairs, time spent on repair, parts and materials used, and class and cause of repair.

Drives vehicles to locate defects and as a final performance check upon completion of repairs; performs road calls and field service to units broken down.

Performs light welding and machine work incidental to completion of repair assignments.

Performs related work as required.

### DESIRABLE KNOWLEDGES, ABILITIES AND SKILLS

Considerable knowledge of the design, construction, repair, and adjustment of a wide variety of both conventional and specialized heavy equipment and machinery.

Considerable knowledge of the usual types of automotive tools and equipment, as well as the special tools, gauges, machinery, and shop equipment used in repair, servicing, and maintenance of heavy equipment.

Knowledge of the operation of different types of automotive testing equipment.

Ability to diagnose the more common defects in the motors and bodies of heavy equipment and machinery.

Ability to detect by inspection any worn, defective, or improperly adjusted part of the assembly.

Ability to determine the necessary procedures and parts required to complete repairs.

Ability to keep records of repair and service operations, and to complete reports.

Ability to direct and supervise a small group of unskilled and semi-skilled workers.

Ability to establish and maintain effective working relationships with supervisors, co-workers and the general public.

Ability to follow oral and written instructions.

Ability to lift up to eighty pounds.

#### DESIRABLE TRAINING AND EXPERIENCE

Graduation from a senior high school or equivalent supplemented by specialized vocational/technical school training with a degree in automotive repair or technology, and experience at the journey level as a heavy equipment mechanic. Automotive Service Excellence (A.S.E.) certification is desirable.

# MINIMUM QUALIFICATIONS

Graduation from a senior high school or equivalent and experience in the repair and maintenance of heavy duty equipment; or any equivalent combination of training and experience which provides the desirable knowledges, abilities and skills.

# NECESSARY SPECIAL REQUIREMENT

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Approved by:	Department Head	Personnel Director	
9/73 Revised 11/87			